**Coding challenge**

A Rust program is needed to simulate a treasure hunt game at the local county fayre.

First, the host marks out a 10 x 10 grid on the county field.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

They then surreptitiously bury 6 different jars containing cash prizes at random locations in the grid, i.e.

* 1 x £100
* 2 x £50
* 3 x £10

**Note. No square in the grid should ever have multiple prizes.**

After all the prizes are hidden, villagers are allowed 3 guesses to pick a square. If the jar is found, its prize value is added to the villager’s total and the jar is physically removed from the grid.

Once the villager has had 3 attempts, their total prize fund is awarded.

**Extension tasks**

1. Run in a loop with multiple customers - whilst prizes are still to be found.
2. (Did you create a 10x10 array? Think again!)